ABSTRACT OF THE DISCLOSURE

Distributed, packet-based premises automation system. The system can include, multiple, distributed, processor-based input/output (I/O) units. Changes in inputs can be broadcast using one or more protocols onto a home or other premises network, and/or the Internet. I/O units can receive commands from the network and effect control of the premises equipment based on those commands. Input and output identifiers have a format that allows them to uniquely identify any input and output in the distributed system, regardless of how large the system is or how many I/O units the system has. Any computer or controller on the network can see the changes in the inputs and any computer or controller can effect changes in an output, providing for true, distributed control. Virtual inputs are provided, each allowing a standard meaning to be applied to a storage bit that represents some state or condition of the premises.